

AMENDMENTS TO THE CLAIMS

Please replace the current version of the claims with the following rewritten version:

1. – 8. (Cancelled)

9. (Currently Amended) An optical cursor control device having a light concentrating pad and an optical pointing device moved on the light concentrating pad by an operator, the light concentrating pad comprising:

an optical wave guide;

a lower reflecting plate attached to a bottom of the optical wave guide for upwardly reflecting light introduced into the optical wave guide;

an upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate, the upper transparent plate having an extension portion protruding from an edge of the lower reflecting plate, an opening in the extension portion for exposing the optical waveguide, and a surface of an entrance of the opening being parallel to a surface of the lower reflecting plate in direct contact with the optical wave guide;

side reflecting plates attached to a portion of sides of the optical wave guide for reflecting the light in the optical wave guide; and

a light concentrating plate attached to the edge of the lower reflecting plate, wherein the light concentrating plate is disposed on another portion of the sides of the optical wave guide and under the opening of the upper transparent plate, extending diagonally and upwardly from the lower reflecting plate to the upper transparent plate, contacting the lower reflecting plate and the upper transparent plate, contacting external light passing through the opening of the upper transparent plate, and reflecting the external light into the optical wave guide,

wherein the lower reflecting plate, the upper transparent plate, the side reflecting plates and the light concentrating plate are configured as one body to constitute the light concentrating pad,

wherein the optical wave guide is a vacant space disposed between the lower reflecting plate, the light concentrating plate, the side reflecting plates and the upper transparent plate, and

wherein a portion of the external light is reflected from the lower reflecting plate and passes through the upper transparent plate at substantially a same time.

10. (Original) The optical cursor control device according to claim 9, wherein the upper transparent plate includes regular patterns drawn on a surface thereof.

11. (Previously Presented) The optical cursor control device according to claim 9, wherein the optical pointing device comprises:

- a case including a lower panel, the lower panel having an opening;
- an optical sensor mounted inside the case for sensing reflected light introduced into the case through the opening; and
- a printed circuit board for processing a signal outputted from the optical sensor to generate an output signal that corresponds to a position of the case.

12. (Previously Presented) The optical cursor control device according to claim 11, wherein the optical pointing device further comprises:

- a switch module disposed on the printed circuit board; and
- a button disposed at the top surface of the case to turn on or off the switch module.

13. – 16. (Cancelled)

17. (Previously Presented) The optical cursor control device according to Claim 9, further comprising: a light source emitting a light toward the light concentrating plate, wherein the light concentrating plate reflects the light from the light source into the optical wave guide.

18. (Previously Presented) An optical cursor control device including a worktable and an optical pointing device moved on the worktable by an operator, the optical pointing device comprising:

- a case;
- a light guide disposed at a sidewall of the case, one portion of the light guide exposed through the sidewall of the case to contact an external environment outside the case, an other portion of the light guide extending from the sidewall of the case to an interior of the case by a predetermined length to contact an internal environment inside the case, the light guide having a

taper shape for acting as a light amplifying means, diameters of the one portion and the other portion being different in size from each other, directly accepting external lights through the one portion of the light guide to obliquely irradiate lights penetrating the light guide onto a surface of the worktable through an opening formed in a lower panel of the case;

an optical sensor disposed in the case and over the opening to detect lights reflecting from the surface of the worktable; and

a printed circuit board with electronic parts processing an output signal of the optical sensor to generate an output signal that corresponds to a position of the case.

19. (Previously Presented) The optical cursor control device according to Claim 18, wherein the light guide includes a light concentrating surface directly accepting the external lights at the one portion and an illuminating surface irradiating the external lights penetrating the protrusion onto the surface of the worktable at the other portion.

20. (Previously Presented) The optical cursor control device according to Claim 19, wherein the illuminating surface has an area smaller than that of the light concentrating surface.

21. (Previously Presented) The optical cursor control device according to Claim 18, further comprising a light emitting device installed in the case, wherein the light emitting device is automatically or manually turned on and lights from the light emitting device are irradiated onto the surface of the worktable through the opening.

22. (Previously Presented) The optical cursor control device according to Claim 18, further comprising:

a switch module mounted on the printed circuit board; and

a button disposed on a top of the case to turn on or turn off the switch module.

23. (Currently Amended) An optical cursor control device having a worktable and an optical pointing device moved on the worktable by an operator, the optical pointing device comprising:

a case;

an optical sensor disposed in the case;
a light guide disposed on an outer sidewall of the case, and including first and second surfaces respectively on predetermined portions of the light guide,
the first surface of the light guide being spaced away from the case and accepting light reflecting from a surface of the worktable adjacent to the case, and
the second surface of the light guide being adjacent to the case and introducing the light penetrating the light guide onto an optical sensor in the case, the first and second surfaces including one optically functioning material, and a remaining portion of the light guide including optically different functioning material from the first and second surfaces; and
a printed circuit board with electronic parts processing an output signal of the optical sensor to generate an output signal that corresponds to a position of the case,
wherein the first and second surfaces are in direct contact with and are supported by the remaining portion of the light guide, and
wherein the light sequentially traverses the first surface, the remaining portion and the second surface of the light guide.

24. and 25. (Cancelled)

26. (Previously Presented) The optical cursor control device according to Claim 23, wherein the light guide further comprises light concentrators disposed at the first and second surfaces, and the light concentrators increase intensities of the lights passing through the light concentrators.

27. (Previously Presented) The optical cursor control device according to Claim 26, wherein the light concentrators are convex lenses.

28. (Previously Presented) The optical cursor control device according to Claim 23, further comprising:

a switch module mounted on the printed circuit board; and
a button disposed on a top of the case to turn on or off the switch module.

29. (Previously Presented) The optical cursor control device according to Claim 23, wherein the first surface and the second surface are parallel to each other.

30. (Previously Presented) The optical cursor control device according to Claim 23, wherein the light guide is disposed directly on and contacting the sidewall of the case.

31. (New) The optical cursor control device according to claim 9, wherein the light concentrating pad is a single unitary indivisible body.